

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.		
038602/1087 International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)	
, ,			
PCT/US 01/04813	15/02/2001	15/02/2000	
Applicant			
SUGEN, INC. et al.			
	The same of the sa	· · · · · · · · · · · · · · · · · · ·	
	een prepared by this International Searching Aut	thority and is transmitted to the applicant	
according to Article 18. A copy is being	transmitted to the international Bureau.		
This International Search Report consis	sts of a total of 5 sheets.		
	by a copy of each prior art document cited in this	s report.	
		· · · · · · · · · · · · · · · · · · ·	
Basis of the report		*	
	ne international search was carried out on the ba	sis of the international application in the	
language in which it was filed, t	unless otherwise indicated under this item.	•	
the international search Authority (Rule 23.1(b))	n was carried out on the basis of a translation of t	the international application furnished to this	
	, ,	nternational application, the international search	
was carried out on the basis of		mematoria application, the international scaron	
contained in the interna	ational application in written form.		
filed together with the in	nternational application in computer readable for	m.	
furnished subsequently	to this Authority in written form.	(X)	
	to this Authority in computer readble form.		
	subsequently furnished written sequence listing on as filed has been furnished.	does not go beyond the disclosure in the	
the statement that the infurnished	nformation recorded in computer readable form i	is identical to the written sequence listing has been	
DVD			
	ound unsearchable (See Box I).		
3. Unity of invention is la	acking (see Box II).		
		•	
4. With regard to the title,			
	submitted by the applicant.		
the text has been estab	lished by this Authority to read as follows:		
	•	•	
5. With regard to the abstract,			
TVI the text has been estab	submitted by the applicant. dished, according to Rule 38.2(b), by this Authori	ity as it annears in Boy III. The annicant may	
	the date of mailing of this international search re		
6. The figure of the drawings to be pu	ublished with the abstract is Figure No.	_	
as suggested by the ap	-	None of the figures.	
	ailed to suggest a figure.	<u></u>	
	ter characterizes the invention.		

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The present invention relates to pyrrole substituted 2-indolinone compounds of Formula (I):

$$R^2$$
 R^3
 R^4
 R^7
 R^6
 R^7
 R^6
 R^7
 R^6

(I)

and their pharmaceutically acceptable salts which modulate the activity of protein kinases and therefor are expected to be useful in the prevention and treatment of protein kinase related cellular disorders such as cancer. A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07D403/06 A61K31/404

A61P43/00

C07D403/14

C07D401/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{C07D} & \mbox{A61K} & \mbox{A61P} \\ \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data

С. DOCUMI	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
x	US 5 886 020 A (PENG CHO TANG ET AL.) 23 March 1999 (1999-03-23) * column1-3; column 22, line 30-39(SU5408); column 25, line 66 - column 26, line 2 (SU5455); column 26, line 26-29 (SU 5463) *	1,50,52
X ⊗ 1	WO 98 50356 A (SUGEN, INC.) 12 November 1998 (1998-11-12) * page 1; page 30, line 1-2; page 44, compound with code 10718/H02 *	1,50,52
ja.		
X Furth	her documents are listed in the continuation of box C. Patent family members are listed	in annex.

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.		
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family 		
Date of the actual completion of the international search 24 October 2001	Date of mailing of the international search report $05/11/2001$		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Van Bijlen, H		

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category • Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	Televant to claim No.
LI SUN ET AL.: "Synthesis and biological evaluations of 3-substituted indolin-2-ones: a novelclass of tyrosine kinase inhibitors that exhibit selectivity toward particular receptor tyrosine kinases" JOURNAL OF MEDICINAL CHEMISTRY., vol. 41, no. 14, - 1998 pages 2588-2603, XP002181002 AMERICAN CHEMICAL SOCIETY. WASHINGTON., US ISSN: 0022-2623 * page 2594 and 2601: compounds 44 and 48	1,50,52
WO 99 61422 A (SUGEN, INC.) 2 December 1999 (1999-12-02) claims	1,50,52
WO 01 37820 A (SUGEN, INC.) 31 May 2001 (2001-05-31) * page 3; table 1-3 *	1,50
WO 00 38519 A (SUGEN, INC.) 6 July 2000 (2000-07-06) * page 141, line 26 - page 142, line 2; claim 18 *	1,50
P,X WO 00 35908 A (F. HOFFMANN-LA ROCHE AG) 22 June 2000 (2000-06-22) examples 39B,116B	. 1

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International application No. PCT/US 01/04813

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Inte	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. χ	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
	Although claims 54-59 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
з. 🗌	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inte	ernational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
	restricted to the invention hist mentioned in the claims, it is covered by claims nos
Remark	t on Protest The additional search fees were accompanied by the applicant's protest.
	No protest accompanied the payment of additional search fees.

NATIONAL SEARCH REPORT

Information on patent family members

ernational Application No PCT/US 01/04813

					101	7 0 0 0 1 7 0 4 0 1 5
	atent document d in search repo		Publication date		Patent family member(s)	Publication date
US	5886020	A	23-03-1999	US	5880141 A	09-03-1999
	***************************************			ΑT	200863 T	15-05-2001
			•	ΑÜ	706597 B2	
				AU	6044196 A	30-12-1996
			,	BR	9606410 A	30-12-1997
				CA	2192797 A1	
				DE	29623744 U1	
				DΕ	69612649 D1	07-06-2001
•				DK	769947 T3	13-08-2001
				EP	0769947 A1	02-05-1997
				ΕP	0934931 A2	
		•		ΗU	9701694 A2	
				JP	2000026412 A	25-01-2000
				JP	10504323 T	28-04-1998
		•				12-02-1997
				NO	965377 A	
	•			NZ	310109 A	28-01-1999
				WO	9640116 A1	19-12-1996
				US	6225335 B1	01-05-2001
				US	5792783 A	11-08-1998
•				US	5883116 A	16-03-1999
				US	5834504 A	10-11-1998
				US	5883113 A	16-03-1999
				US	2001027207 A1	04-10-2001
			10 11 1000		7604000 4	27 11 1000
WO	9850356	Α	12-11-1998	AU	7684298 A	27-11-1998
				EP	0984930 A1	15-03-2000
		•		WO	9850356 A1	12-11-1998
	•			US	6051593 A	18-04-2000
0			•	US	6130238 A	10-10-2000
				US	6114371 A	05-09-2000
•		•		AU	7661498 A	27-11-1998
				US	.6133305 A	17-10-2000
				US 	2001007033 A1	05-07-2001
WO	9961422	Α	02-12-1999	UA	4410299 A	13-12-1999
	•			CN	1311775 T	05-09-2001
				EΡ	1082305 A1	14-03-2001
	•			NO	20005916 A	
				WO	9961422 A1	02-12-1999
<u>п</u> О	0137820	-	31-05-2001	AU	1928501 A	04-06-2001
	013/020	Л	31 33 2001	WO	0137820 A2	
WO	0038519	· A	06-07-2000	AU	2221500 A	31-07-2000
			· -	BR	9916735 A	25-09-2001
	*			EP	1139754 A1	10-10-2001
		·		WO	. 0038519 A1	06-07-2000
WO	0035908	A	22-06-2000	AU	1972700 A	03-07-2000
				BR	9916327 A	18-09-2001
		-	•	WO	0035908 A1	22-06-2000
				ÜS	6130239 A	10-10-2000
				118	hysyliah ki	/0-00-/1111
•				US US	6252086 B1 6303793 B1	26-06-2001 16-10-2001